

**AMENDMENTS TO THE CLAIMS**

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double brackets indicating deletions.

**Listing of the Claims**

1. (CURRENTLY AMENDED) An interventional procedure simulation system, comprising:

a control unit and an interface unit, said control unit communicating with said interface unit to simulate handling of at least one instrument interfaced by said interface unit,

wherein said instrument is a self expanding tool inserted inside a simulated vessel, and

the control unit is configured to simulate said instrument  
~~simulated~~ with respect to a set value representing ~~an~~ a stiffness of said vessel, a rest diameter of said self expanding tool, ~~a vessel~~ an initial inner diameter of said vessel and a spring constant for said tool.

2. (PREVIOUSLY PRESENTED) The system of claim 1, wherein said instrument is a stent.

3. (PREVIOUSLY PRESENTED) The system of claim 1, wherein said instrument is a distal protection device.

4. (CURRENTLY AMENDED) The system of claim 3, wherein said distal protection device comprises a ~~substantially~~ double cone attached at two ends to a wire, ~~and covered by a sheath.~~

5. (PREVIOUSLY PRESENTED) The system of claim 4, wherein a distal part of one cone is a net for simulating catching particles that can be set free during an intervention simulation.

6. (CURRENTLY AMENDED) A method of simulating ~~in an~~ interventional procedure simulation system including, ~~comprising~~ a control unit and an interface unit, said control unit communicating with said interface unit to simulate handling of at least one instrument interfaced by said interface unit, the method comprising:

- providing ~~a~~ said at least one instrument as a self expanding tool inserted inside a simulated vessel; and
- simulating said at least one instrument with respect to a set value representing ~~an~~ a stiffness of said simulated vessel, a rest diameter of said self expanding tool, ~~a vessel~~ an initial inner diameter of said simulated vessel and a spring constant for said self expanding tool.

7. (NEW) An interventional procedure simulation system, comprising:

a control unit communicating with said interface unit to simulate handling of at least one instrument interfaced by said interface unit, wherein

said at least one instrument is a self-expanding tool inserted inside a simulated vessel, and the control unit is configured to simulate said instrument with respect to a set value representing an stiffness of said simulated vessel, a rest diameter of said self-expanding tool, an initial inner diameter of said simulated vessel, and a spring constant for said self-expanding tool; and

an interface unit, said interface unit including a detecting member adapted to detect a thickness of said at least one instrument, and an optical sensor adapted to detect the presence of said at least one instrument in the interface unit,

wherein said control unit is further configured to measure a longitudinal movement and a movement of rotation of said at least one instrument and providing a force-feedback in a longitudinal direction and in a direction of rotation of said at least one instrument according to a received force and torque.

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END OF CLAIM LISTING

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